CLAIMS

We claim:

1. A method for dynamically controlling the sequence of execution of image processing algorithms, without recompiling an image processing computer program, the method comprising:

providing a plurality of image processing elements as self-contained modules which can be executed individually in a plurality of possible sequences;

providing an image processing chain in a script capable of execution by a script interpreter in a computer arranged to receive raw image data;

wherein the image processing chain determines a selected sequence of execution of the image processing elements; and

relating the image processing chain to a clinical protocol, which is subsequently executed by the computer while running a compiled image processing computer program to process image data.

2. The method of claim 1, wherein the plurality of processing elements in an image processing chain are stored in a repository of image processing elements for easy access during image processing chain editing operations.

3. The method of claim 2, wherein the repository of image processing elements is stored on a memory storage device dedicated to that function and accessible by the computer.

4. The method of claim 1, wherein the image processing chain be related to any one of a plurality of clinical protocols.

5. The method of claim 1, wherein the method is carried out by an administration tool comprising a plurality of image processing tools which can be

installed on the computer associated with the item of medical imaging equipment and executing the image processing application to process the raw data into an image that can be displayed.

6. The method of claim 1, wherein the algorithm module is generated in a tool command language.

7. The method of claim 1, wherein the image processing chains are generated with a text editor.

8. The method of claim 1, wherein the raw image data is received from an item of medical imaging equipment.

9. The method of claim 8, wherein the medical imaging equipment is a CT scanner.

10. The method of claim 8, wherein the medical imaging equipment is an MR scanner.

11. The method of claim 8, wherein the medical imaging equipment is an ultrasound imaging machine.

12. The method of claim 8, wherein the medical imaging equipment is an x-ray RAD scanner.

13. A method for constructing image processing chains that can be easily edited for addition of new processing algorithms, the method comprising:

specifying image processing elements in an image processing chain;

applying the image processing elements in a sequence or in parallel to one or more resulting images to be displayed;

defining inputs for each image processing element;

defining outputs for each image processing element;

saving output images of different image processing chains.

14. The method of claim 13, further comprising:

constructing additional image processing chains from smaller image processing chains, said smaller image processing chains being related in sequence or in parallel.

15. The method of claim 15, further comprising conditionally applying image processing chains.

16. A method for adding an image processing algorithm to a compiled image processing computer program, without recompiling the image processing computer program, the method comprising:

providing a plurality of image processing elements as self-contained modules which can be executed individually in a plurality of possible sequences; and

providing an image processing chain in a script capable of execution by a script interpreter in a computer arranged to receive raw image data;

adding a new image processing element;

configuring the image processing chain to determine the sequence of execution of the image processing elements including the new image processing element; and

relating the image processing chain to a clinical protocol, which is subsequently executed by the computer while running the compiled image processing computer program to process image data.

17. The method of claim 16, further comprising:

modifying the image processing chain using a text editor; and

relating the modified image processing chain to a clinical protocol, which is subsequently executed by the computer while running the compiled image processing computer program to process image data

18. The method of claim 17, wherein the method is carried out by an administration tool comprising a

plurality of image processing tools which can be installed on the computer associated with the item of medical imaging equipment and executing the image processing application to process the raw data into an image that can be displayed.

19. The method of claim 16, wherein the plurality of processing elements in an image processing chain are stored in a repository of image processing elements for easy access during image processing chain editing operations.

20. The method of claim 19, wherein the repository of image processing elements is stored on a memory storage device dedicated to that function and accessible by the computer.